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COVID-19 in Italy - Passing through bitter waters

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TO THE EDITOR:

The catastrophic impact of the coronavirus disease 2019 (COVID-19) epidemic in Italy has been described previously.[1, 2] In a recent editorial, Nava and co-authors pay a well-deserved tribute to the almost 200 health care workers who succumbed to COVID-19 in the country in less than 3 months since the first case was reported.[3] We would like to contribute with some considerations on the shortcomings of Italy's response to the pandemic.

Around the first COVID-19 cluster in Northern Italy, between the regions of Lombardy and Emilia-Romagna, the explosion in the caseload has been abrupt.[4] Soon, resources became insufficient to provide adequate assistance to all patients who required it.[5] As the system got progressively overwhelmed, the death toll started to rise.

During these weeks working among the communities paying the highest price to the epidemic, we have witnessed the relentless commitment of health care personnel at all levels. It was at once moving and disheartening to observe them struggling to cope with unbearable workloads in a system which was not prepared to support them. Faced with exhausting shifts and often without adequate personal protective equipment, health care workers have been unsurprisingly affected by high rates of infection and death.[6] Indeed, as shown by Nava and co-authors, 65% of the casualties among medical doctors occurred in the two aforementioned regions.[3]

An obvious reason for Italy's inadequate outbreak response can be found in years of neglect for the public sector, increased private expenditure, and health care budget cuts by governments of all political affiliations.[7] Other major shortfalls stem, in our opinion, from the extreme regionalization of health care, which has led to fragmentation of the decision-making process, increased inequalities, and lack of national coordination.[8]

For instance, COVID-19 testing policies vary widely in Italy, where some regions perform mass contact tracing and outreach activities, while others prioritize severely-sick patients. The role of general practitioners in outbreak response activities is also differing substantially across the country. This heterogeneity, coupled with ambiguous communication, has generated inefficiencies and confusion.

Resource allocation in the emergency was similarly impacted, in particular for the management of intensive care unit needs. As previously highlighted, Italy already had a modest number of intensive care unit beds. [9] During the last years, this number has been progressively tapered due to budget necessities, ignoring repeated warning by experts, [10] and leading to complete unpreparedness to handle the burden of patients who required intensive support. Major differences between regions, even neighboring ones, in terms of respiratory equipment availability were obvious on everyday news. Nevertheless, inter-regional collaboration was limited. Most patient transfers to relieve overwhelmed intensive care units were indeed performed inside the same region, or towards foreign countries.

Finally, the lack of standardization also affected patient management, which was guided by regional - not national - guidelines. Moreover, participation to clinical trials and access to investigational drugs were easier for bigger centers and University hospitals, where greater research experience and manpower facilitated their implementation.

Quoting a famous colleague, Doctor Van Helsing from Bram Stoker's *Dracula*, we will have to pass through the bitter waters before reaching the sweet. Once there, though, this historic opportunity for reform should be seized: strengthening our public health care system, reinforcing a central governance, reducing inequalities across regions, and going back from "aziende ospedaliere" (hospital companies) to just hospitals. Only then, we will be ready to react efficiently to next pandemic threat while protecting adequately our health care workers.[1]

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